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10/809,143

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11/21/2006

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EXAMINER

GUTIERREZ, ANTHONY

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 10/809,143 | Applicant(s) CIFRA ET AL. | |
| | Examiner Anthony Gutierrez | Art Unit 2857 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities:

It contains the grammatically incorrect wording, "each one the one or more". It is missing the word "of". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has amended the claims to include the recitation of "**an input** signal" before the recitation of "**a first input** signal" which is provided by "**an input** signal source".

It is unclear to the Examiner if the first mentioned "input signal" is equivalent to the later mentioned "first input signal". It is unclear because the "first" signal is not mentioned first, and because the source which provides it is called "an input signal source" not "a first input signal source".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-21 are rejected under 35 U.S.C. 102(a) as being anticipated by Hoffberg et al. (United States Patent Application Publication: US 2002/0151992 A1).

As to claims 1-3 and 19-21, Hoffberg et al. discloses a memory medium comprising program instructions for specifying a signal analysis function, wherein the memory medium is in a computer system comprising a display, wherein the program instructions are executable to implement: receiving user input specifying a first operation, wherein the operation implements at least a portion of a signal analysis function (paragraphs 0888, 0890, and 0247); automatically (paragraphs 0921, 0922, and 0914) analyzing prior operations input by the user to determine one of the prior operations as an input signal source for the first operation with respective signal and data types, wherein the input source provides a first input signal (paragraph 0880); performing the first operation on the first input signal received from the input source, wherein said performing produces an output signal displaying the output signal on the display for each of a plurality of first operations input by the user, wherein the respective output signals comprise the first input signal (paragraphs 0881 and 0882).

As best understood by the Examiner, changes to the language of the claims now specify that operating as a **signal source** can be carried out when an operation is

operable to generate a respective signal. It follows then that the input signal source that provides a first input signal can be **any prior operation that operates to generate** a respective signal in a later (first) operation which is performed on the first input signal to produce an output signal. The first operation would necessarily require an input signal if it were to be performed on in order to produce an output, so the additional reference to this amended language is redundant. The claims further require that the first operation implements at least a portion of a signal analysis function and that user input be specified regarding it.

The amended claim language therefore calls for any prior operation that operates to generate a respective signal in which at least a portion of a signal analysis function is performed in a subsequent (first) operation, with user input specifying the operation, in order to produce an output.

The Examiner maintains that this language also characterizes the teachings of Hoffberg et al. addressed previously.

The Examiner has previous addressed (paragraph 0888) that an image processor as a function of characterization data produces a signal corresponding to image types of the characterization data. The Examiner considers this to be an **operation** that **operates to generate** a respective signal.

Furthermore, the Examiner has addressed that this is performed prior to an operation with user input specifying the operation which implements at least a portion of a signal analysis function that produces an output, with respect to the adaptable programmable apparatus of paragraph 0891.

The Examiner therefore considers the claim language to be met by the art of record.

Furthermore, regarding claim 2, the Examiner considers the broad limitation, "wherein each one the one or more inputs has an associated signal type" to be redundant to the earlier limited "respective signal types of each of the one or more inputs."

Regarding the specific change of the word, "data" to "signal", with respect to type, the Examiner again refers to paragraph 0891. The paragraph teaches that analysis occurs to determine inputs required for the first operation, namely the "feedback device for adaptively providing information relating to the input signal and a current status of the apparatus to the programmer". This adaptive analysis requires determination of the current status of the apparatus as based, in part, on derived weighing of at least a subset of possible choices, the derived weighing being based on a **history** of use, a **context** of a respective choice and the current **status** of the apparatus".

The history, context, and status are all inputs required for the first operation in this adaptive process.

Paragraph 0890 addresses that feedback on the current state of the apparatus has an alterable image type. Thus the history, context and status are respective of, or associated with, an alterable image type.

Paragraph 0888 indicates that an image processor receives as inputs the characterization data memory which is related to image types and produces a corresponding signal.

Thus the history, context, and status are respective of, or associated with, signal types, where it is understood that the types of signals correspond to the types of images which the image processor operates with in order to generate them.

As to claims 4, 7, and 8, Hoffberg et al. discloses querying a database to determine the prior operation that provides an output signal of the appropriate signal type (paragraphs 0296 and 0821), wherein the database comprises information indicating respective output signal types of the prior operations, analyzing input/output (I/O) dependencies among the prior operations and the first operation (paragraph 0819), wherein the (I/O) dependencies indicate a proximity ordering of the prior operations with respect to the first operation; and querying the database based on the proximity ordering of the prior operations, beginning with an initial prior operation that is closest to the first operation with respect to (I/O) dependencies (paragraph 0891 with respect to the chronological database).

As to claims 9 and 10, Hoffberg et al. discloses, iteratively querying the database for each of a plurality of input signals (paragraph 0883 and 0901, where the reference discloses that the programmable control may further comprise the chronological database).

As to claims 5 and 6, Hoffberg et al. discloses querying a first function block to determine the one or more appropriate signal types for the first operation, wherein the first operation requires a plurality of input signals, querying the first function block to determine a number of inputs required for the first operation; and programmatically analyzing prior operations input by the user to determine a plurality of input sources for the first operation corresponding to the number of input signals required for the first

operation (paragraphs 1088 and 1089, with respect to the fractal compression method of Barnsley and Sloan as it applies to automatic image processing in the present invention, see also paragraphs 1095 and 1096).

As to claims 11 and 12, Hoffberg et al., discloses that if no prior operations provide an output signal of an appropriate signal type, displaying one or more additional operations that provide an output signal of the appropriate signal type; and receiving additional user input selecting an additional operation from the additional operations (paragraph 0823).

As to claims 13-18, Hoffberg et al. receiving user input modifying a configuration of a first function block, thereby changing input signal specifications for a corresponding operation, wherein original input signal specifications for the corresponding operation specify a first input signal type for the corresponding operation, and wherein the changed input signal specifications specify a second, different, input signal type for the corresponding operation including the use of a second output signal type (paragraph 0237), including displaying a diagram that visually represents I/O relationships between function blocks, including automatically updating the diagram in accordance with the changed I/O relationships between the function blocks (paragraph 0245).

Response to Arguments

6. Applicant's arguments filed 8/18/06 have been fully considered but they are not persuasive.

The Applicant has argued that the reference of rejection to Hoffberg fails to disclose programmatically analyze prior operations input by a user, emphasizing specifically, for determining an input source for the first operation.

The Examiner disagrees.

The Examiner reiterates his arguments regarding this limitation. In the Examiners interpretation of the references, the first operation relates to a signal analysis function. The reference in the cited sections regarding claim 1, discloses the use of adaptive prediction based on the history of use regarding a user with respect to an image type. The cited sections also disclose that a signal is produced that corresponds to a relation between at least one of a plurality of images of compressed data at least one of the image types of characterization data (see also paragraph 0886). This signal is what is being analyzed in the first operation. The Examiner considers the image type to be an input source for this operation.

Furthermore, the Examiner has addressed above that the image types are alterable related to feedback on the current status of the apparatus and that feedback regarding the current status of the apparatus is with respect to the weighing of possible choices, including the history, context, and status addressed above.

Since the claims are limited such that providing a first input signal is carried out when one or more of the prior operations is operable generate a respective signal, the Examiner believes an understanding of the adaptive process of the feedback device

implies this step of signal provision, consistent, with the Applicant's claimed limitation that the input signal source **provides** a first input signal and that the **source** which provides this signal is an "operation that is operable to generate" the signal.

The Examiner does not consider the references to teach away from the claimed invention. The Applicant asserts that, "the sources for data/images/signals are all known". The Applicant has not provided a citation regarding this assertion, nor any further analysis. As best understood, the Examiner considers this to be reflective of a difference in interpretation of the references. While some data/images/signals/ may be known, specific ones with respect to a future iteration of an adaptive process based on feedback are not known, until they are determined before the next iteration. Notwithstanding this point, the Examiner does not understand how knowing data/images/signals necessarily teaches away from determining an "input source."

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory

action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Gutierrez whose telephone number is (571) 272-2215. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Anthony Gutierrez

11/9/06


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